

# 802.3 Frame Expansion Study Group

## *Report to 802.3 CSMA/CD WG*

San Antonio, Texas

15 November 2004

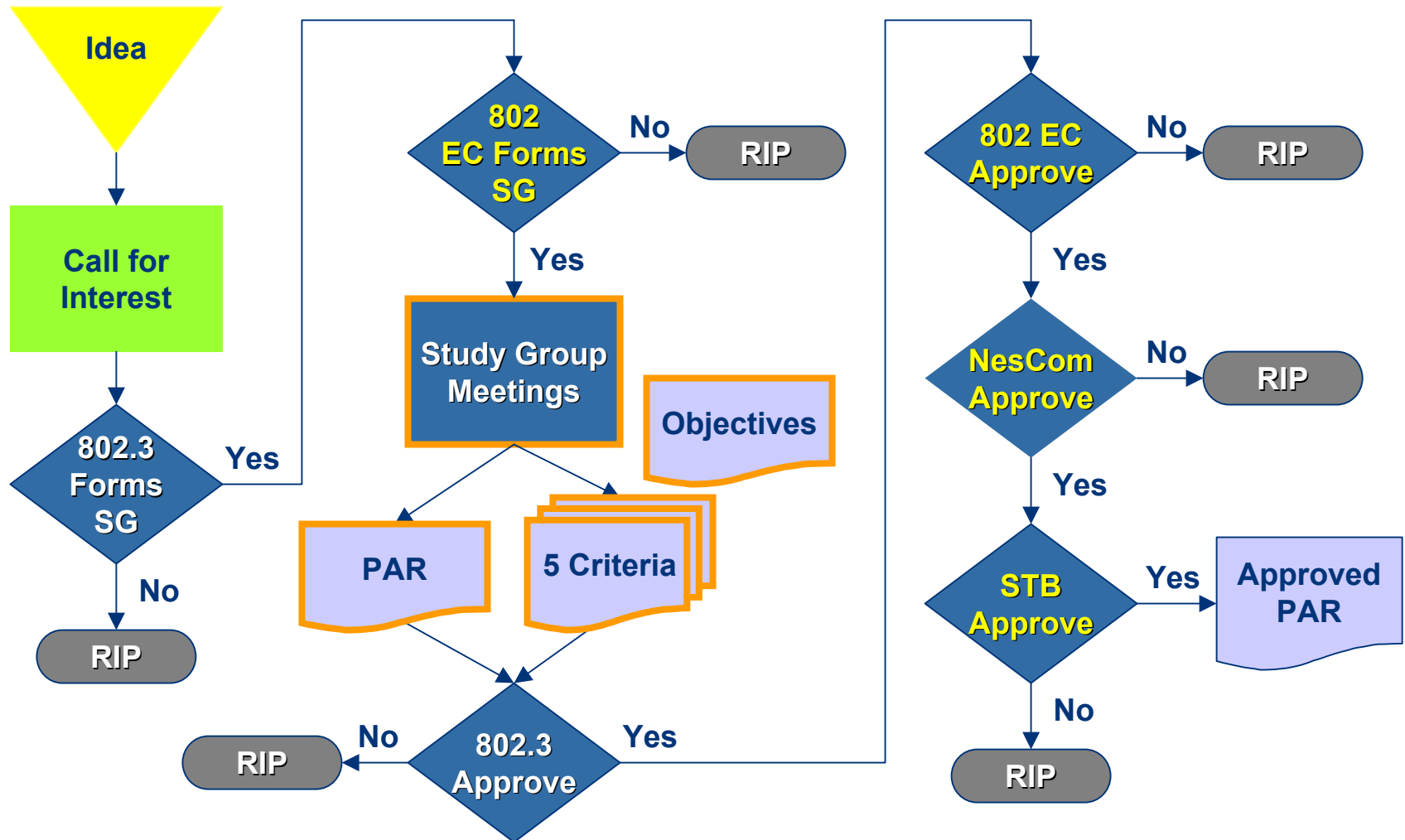
# *Agenda*

- **Reflector and web**
- **IEEE 802.3 standards process**
- **September interim**
- **Objectives**
- **Proposed frame format changes**
- **Project timeline**
- **Plan for week**

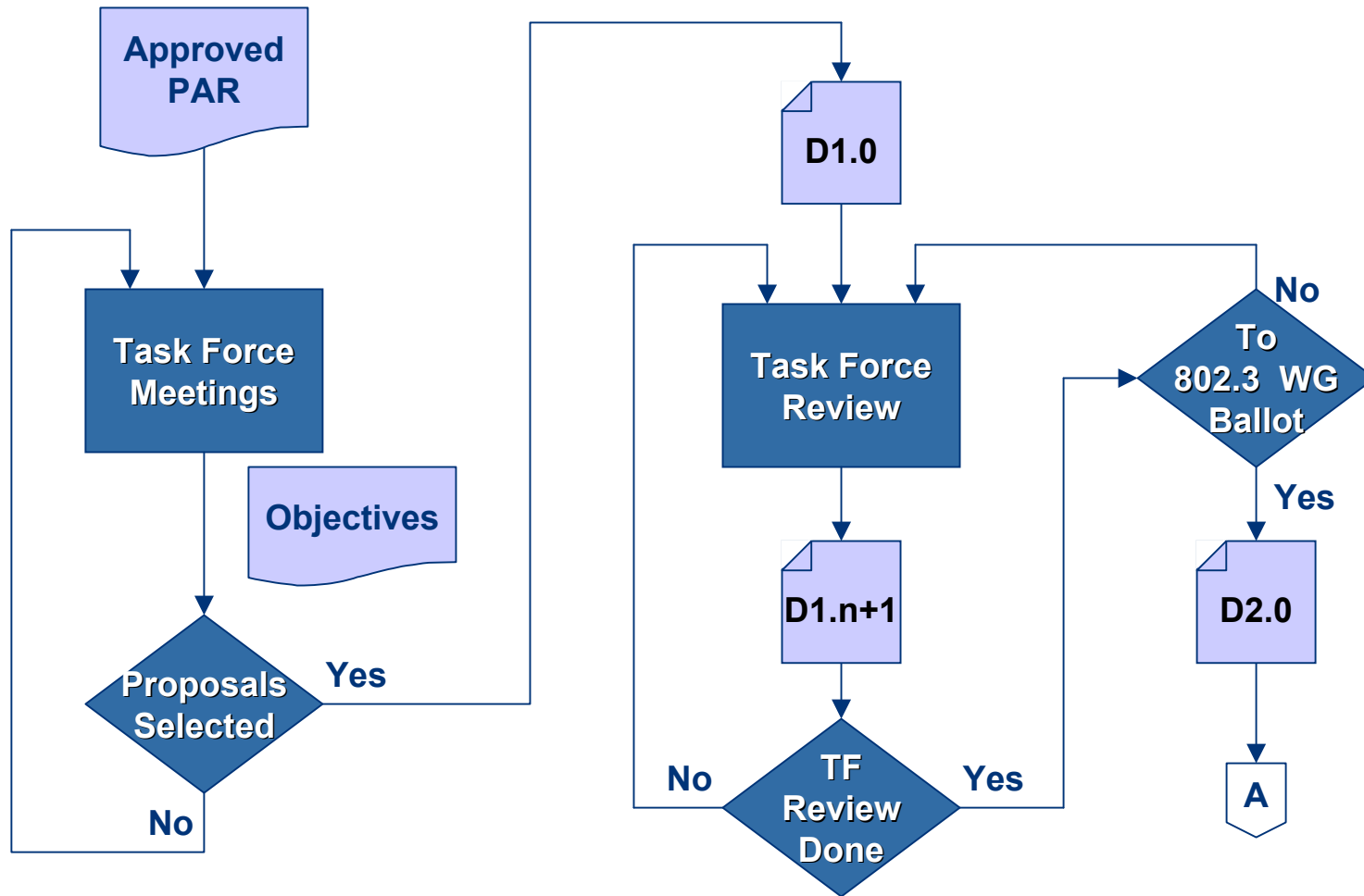
# Reflector and Web

- List subscribers: **48** (as of 11/14)
- To subscribe to the Frame Expansion SG reflector send an email to:  
**listserv@ieee.org**
- with the following in the body of the message:  
**subscribe stds-802-3-fe <first name> <last name>**
- Frame Expansion SG web page URL:  
**[http://www.ieee802.org/3/frame\\_study/](http://www.ieee802.org/3/frame_study/)**

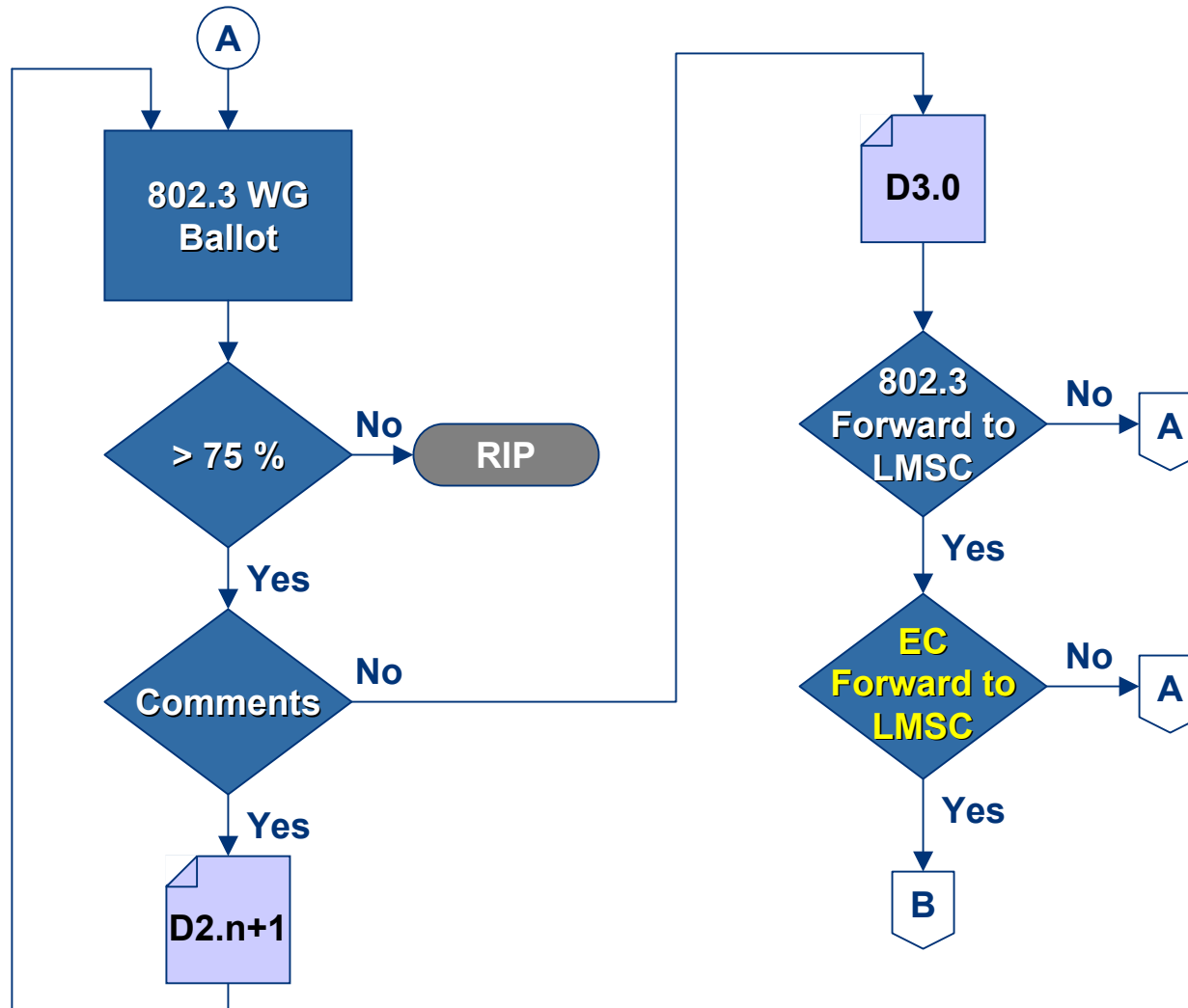
# IEEE 802.3 Standards Process (1/4)



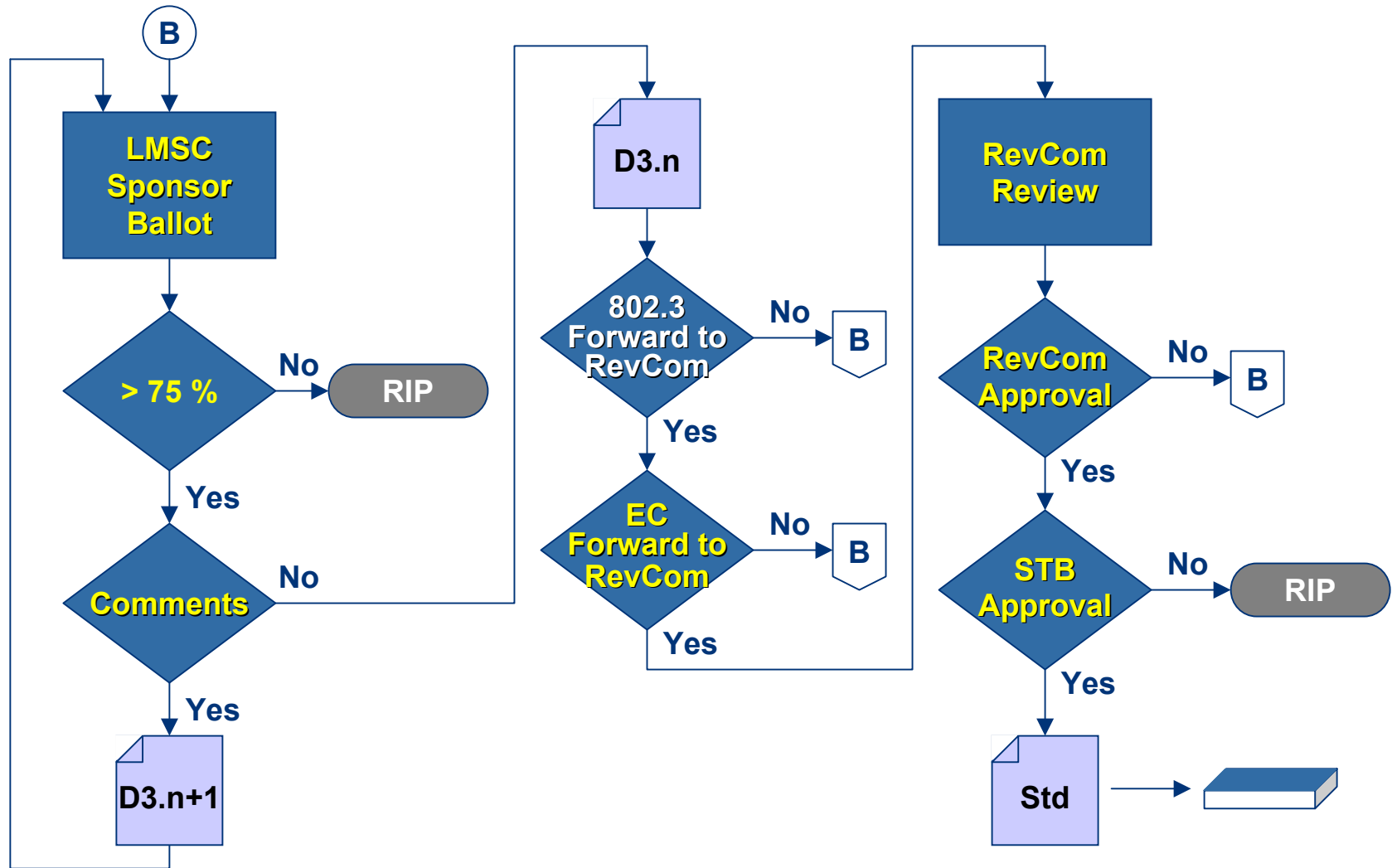
# IEEE 802.3 Standards Process (2/4)



# IEEE 802.3 Standards Process (3/4)



# IEEE 802.3 Standards Process (4/4)



# *September Interim*

- 1-day interim, Ottawa
- ~15 attendees (peak)
- Reviewed presentations, test results
- Approved PAR, 5 criteria
- Adopted objectives
- Passed motions to pre-submit PAR, 5 criteria to 802 EC and NesCom
  - Refer to:

[http://www.ieee802.org/3/frame\\_study/](http://www.ieee802.org/3/frame_study/)

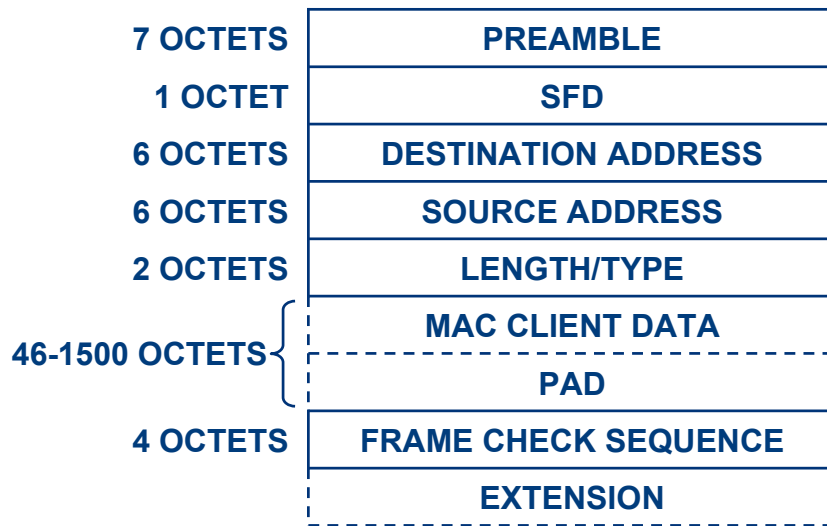


# Objectives

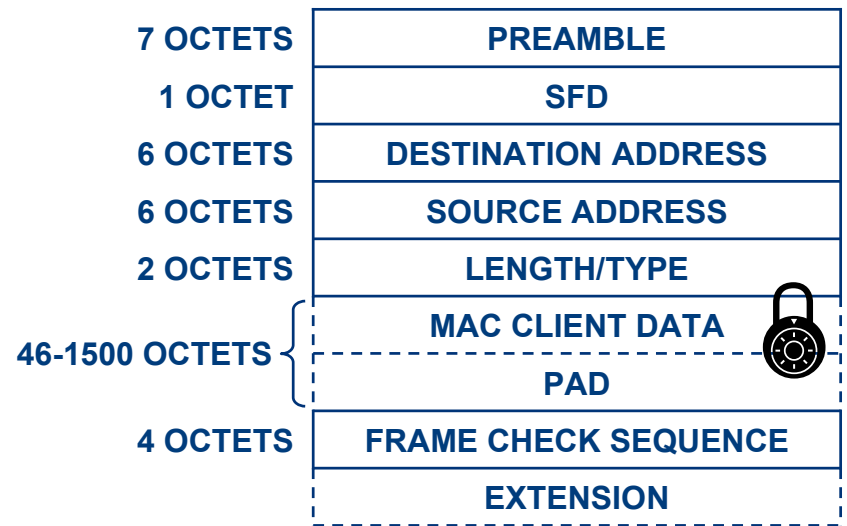
- 1) Preserve the IEEE 802.3 MAC data service interface
- 2) Preserve the basic frame format
- 3) Maintain the maximum data field length (1500 octets)
- 4) Increase the maximum frame size exclusively for optional prefix and suffix fields in envelope frames
- 5) Redefine the Tagged frame format as an envelope frame format
- 6) At a minimum, support:
  - a) IEEE 802.1Q Virtual Bridged LANs
  - b) IEEE 802.1ad Provider Bridges
  - c) IEEE 802.1AE MACSec
  - d) ITU-T SG15 Ethernet transport encapsulations
- 7) Investigate and define the largest maximum frame size with minimal impact to existing networks and standards

***Approved by Frame Expansion SG on 9/30/2004***


# Figure 3-1



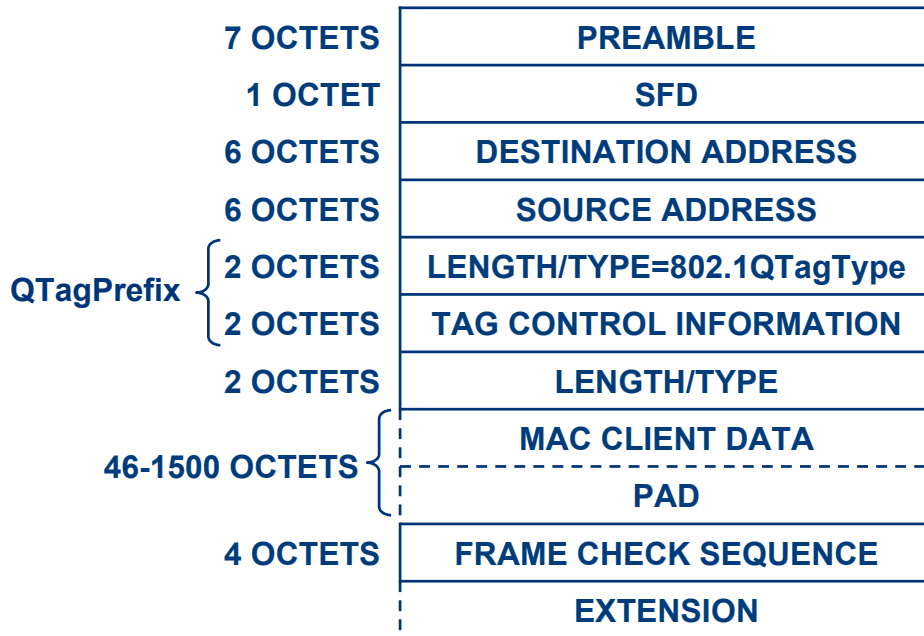
Current Figure 3-1  
MAC frame format



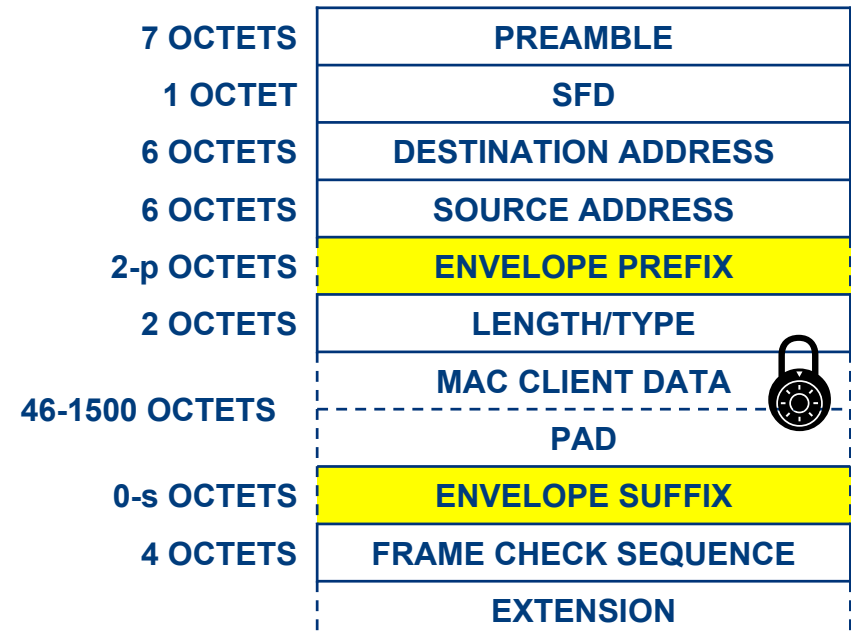
**NEW** Figure 3-1  
MAC frame format

*Note: The padlock  may or may not be included in the standard. It is included now for reinforcement of the SG's intention to keep the existing max data field.*

# Figure 3-3



Current Figure 3-3  
Tagged MAC frame format

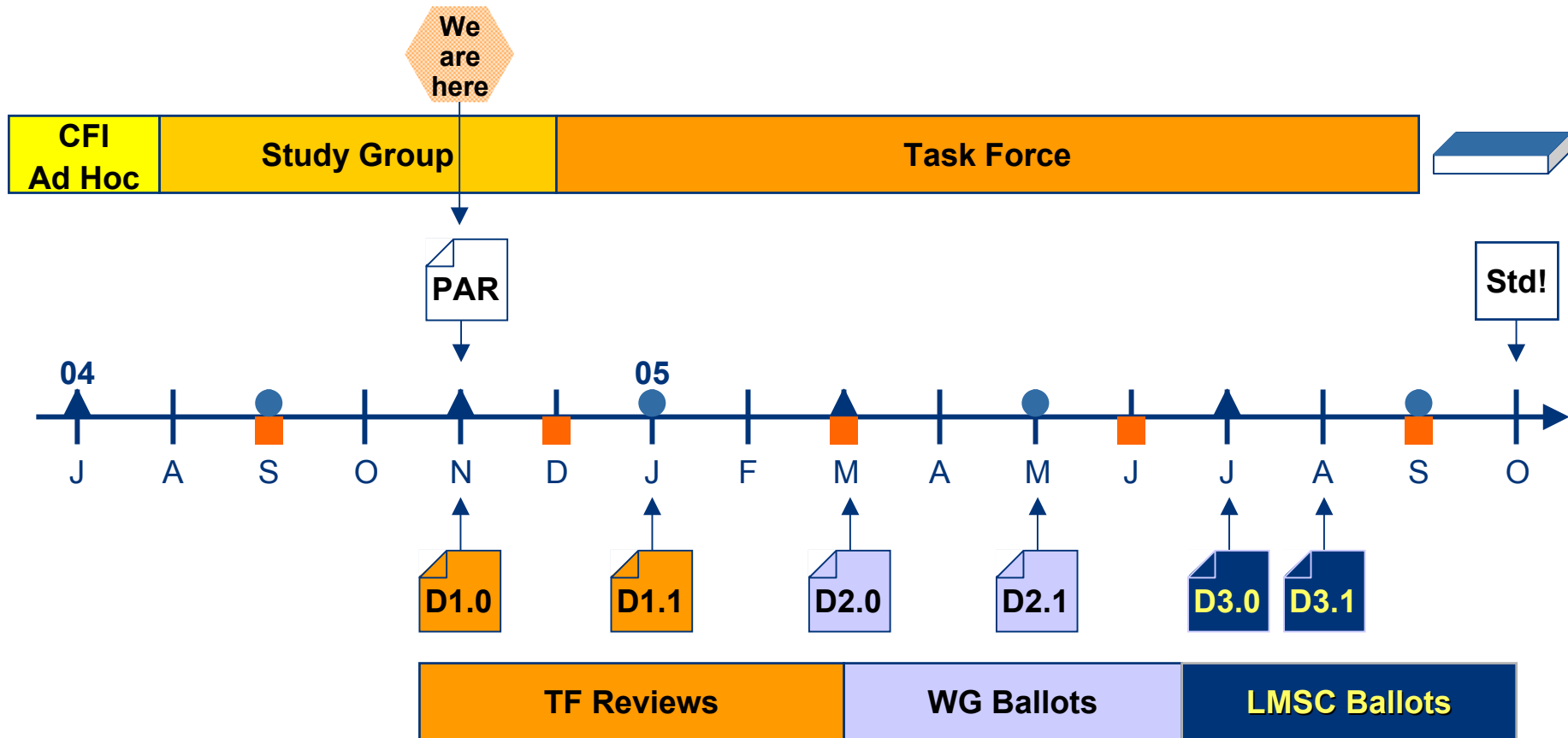


**NEW** Figure 3-3  
Envelope MAC frame format

p is 2 to max[2, TBD – suffixSize]

s is 0 to max[0, TBD – prefixSize]

# Possible timeline



## Legend

- ▲ IEEE 802 Plenary
- IEEE 802.3 Interim
- IEEE-SA Standards Board

# *Plan for week*

- **Tuesday (11/16): St. Anthony Club**
  - **Capture remaining research items**
    - Error robustness, impacts to FEC, etc
  - **Review possible changes to 3, 4, 4A**
  - **Plan D1.0, discuss timing of initial TF ballot**
- **Thursday (11/18): 802.3 closing plenary**
  - **Get 802.3 approval of FESG PAR, 5 criteria, objectives**
- **Friday (11/19)**
  - **Get 802 EC approval of PAR, 5 criteria**

**Thank you**